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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/663,209	09/16/2003	Donald A. Baines	Agere-6 (Baines 1-3-7)	2357

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EXAMINER	
PHAM, TAMMY T	
ART UNIT	PAPER NUMBER
2629	
MAIL DATE	DELIVERY MODE
06/30/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/663,209	BAINES ET AL.	
	Examiner	Art Unit	
	TAMMY PHAM	2629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *04 April 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *2-8,11-17,20-24,26 and 27* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *2-8,11-17,20-24,26-27* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. Claim 1, 9-10, 18-19, 25 have been cancelled. Claims 2-8, 11-17, 20-24, 26-27 are pending.

Response to Arguments

2. Applicant's arguments filed 4 April 2008 have been fully considered but they are not persuasive.

3. § 103 Rejection

4. **In regards to independent claims 6, 8, 12,** Applicant submits that one *"would not have added an additional component to the device of the Knee patent in order to accomplish a function that the unmodified device of the Knee patent can already perform (Remarks 3)."* This is not persuasive.

5. First, there is nothing that prohibits the combination of two references, simply based upon the fact, that there may be some overlap of the scope of each reference.

6. Second, although Knee may teach that the light source may measure both translation and rotation of the scanning mouse (Remarks 3). Knee does not explicitly teach of a second light source that determines position information (claim 6). Montgomery was brought in to teach of a second light source that determines position information (column 5, lines 38-31).

7. Hence, the second light source of Montgomery combined with the capturing device of Knee teaches upon the claim limitations as currently stated.

8. **In regards to independent claims 6, 8, 12,** Applicant further submits that one would not *"modify the Knee patent with position detection means, such as those discussed in Montgomery patent, requiring transparencies, horizontal and vertical marking lines, or marked constraints or screens (Remarks 4)."* This is not persuasive.

9. The test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981). In this case, it would have been obvious to one with ordinary skill in the art at the time the invention was made to include the separate light source of Montgomery with the capturing device of Knee in order to allow greater flexibility in the design, since each light source may be individually adjusted.

10. **In regards to independent claims 6, 8, 12,** Applicant further submits that the reason for combining Knee and Montgomery is not supported (Remarks 4). This is not persuasive.

11. In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988)and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992).

12. In this case, the second light source of Montgomery combined with the capturing device of Knee allows the apparatus to "provide information indicating not only the position of the scanner but also the angle at which the scanner is held (Montgomery, column 1, lines 50-55)."

13. **In regards to claims 7, 11,** Applicant seems confused about the cited reference for the official notice taken for the limitation *"that the light emitted from the first light source has a larger angle of incidence with the surface than the light emitted from the second light (Remarks 5)."* Please refer to Anderson et al. (U.S. Patent No.: 6,657,184 B2).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

14. Claims 2-8, 11-17, 20-24, 26-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over KNEE et al. (US Patent No: 5,994,710) in view of Montgomery et al. (US Patent No: 4,797,544).

15. **As for independent claims 6, 12,** KNEE teaches of a method comprising:

16. capturing a plurality of image parts (column 3, lines 37-38);

17. determining position information corresponding to each of the plurality of image parts; and

18. generating image information using, at least, the plurality of image parts and the corresponding position information (column 12, lines 49-53);

19. wherein the act of capturing a plurality of image parts includes focusing light (Fig. 1, item 2) reflected from a surface (Fig. 1, item 5) onto an image pickup device (Fig. 1, item 10, column 6, lines 18-20);

20. wherein the act of determining position information includes accepting, by the image pickup device (Fig. 1, item 10), light reflected from the surface (Fig. 1, item 5),

21. wherein the light reflected from the surface (Fig. 1, item 5) is emitted from a first light source (Fig. 1, item 2, column 6, lines 30-33);

22. wherein the light emitted from the first light source (Fig. 1, item 2) and reflected from the surface (Fig. 1, item 5) onto the image pickup device (Fig. 1, item 10) is used in the act of capturing a plurality of image parts (column 6, lines 10-15) and determining position information (column 6, lines 30-33).

23. KNEE fails to teach of a second light source, and that the second light determines position information (while the first light source captures a plurality of image parts).

24. Montgomery teaches of a second light source (Fig. 6, item 151) that determines position information (column 5, lines 38-31).

25. It would have been obvious to one with ordinary skill in the art at the time the invention was made to include a second light source of Montgomery with the capturing device of KNEE in order to have each light source provide a unique purpose in the overall scheme of the mouse. The advantage of having each light source provide a different purpose or function to the mouse is that this allows greater flexibility in the design of the mouse, since each light source may be adjusted accordingly in order to better carry out its unique purpose (Montgomery, column 1, lines 50-55).

26. **As for independent claims 8, 24,** in addition to the claim limitations of claim 6 as analyzed above; KNEE further teaches that the act of determining position information includes focusing light reflected from the surface (Fig. 1, item 5) onto a second image pickup device (Fig. 2c, item 30, column 11, lines 25-30).

27. **As for claims 2, 3,** KNEE teaches that the position information includes coordinate information (column 12, lines 49-53) {claim 2}; and change of position information (column 11, line 64) {claim 3}.

28. **As for claims 7, 11, 20,** KNEE as modified above by Montgomery fails to teach that the light emitted from the first light source has a larger angle of incidence with the surface than the light emitted from the second light source.

29. Examiner takes official notice that it is well known in the art to have the second light source be positioned at a different angle from the first light source. For evidentiary reference, please refer to Anderson et al. (US Patent No: 6,657,184 B2) where clearly shows that the two light sources (Fig. 3, items 3, 27) are positioned at different angles.

30. It would have been obvious to one with ordinary skill in the art at the time the invention was made to position the first light source to have a higher angle of incident with the surface than the second light source in order to reflect more light to a wider area, thereby allowing a greater image area to be captured.

31. **As for claims 13-17,** KNEE teaches that the position information includes coordinate information (column 12, lines 49-53) {claim 13}; change of position information (column 11, line 64) {claim 14}; orientation information {claim 15}; acceleration information {claim 16} and velocity information {claim 17} in column 1, lines 40-45.

32. **As for claims 21, 22, 23,** KNEE as modified above by Montgomery teaches that the second light source is a light emitting diode {claim 21}; infra-red light emitting diode {claim 22} tunable light source able to modulate at least one of wavelength, polarization, and amplitude {claim 23} (KNEE: column 5, lines 20-25).

33. **As for claims 26, 27,** KNEE teaches that the image parts (not shown) are captured from a paper document (Fig. 1, on item 5, column 5, lines 33) and wherein the act of generating image

information using, at least, the plurality of image parts (not shown) and the corresponding position information uses the image parts (Id.) to compose a larger image (column 6, lines 53-60)

Conclusion

34. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

35. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

36. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tammy Pham whose telephone number is (571) 272-7773. The examiner can normally be reached on 8:00-5:30 (Mon-Fri).

37. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sumati Lefkowitz can be reached on (571) 272-3638. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

38. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

TP
22 June 2008

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